



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,014	05/08/2006	Jesse J. Kuhns	END5188USPCT	5259
27777	7590	06/27/2011		
PHILIP S. JOHNSON JOHNSON & JOHNSON ONE JOHNSON & JOHNSON PLAZA NEW BRUNSWICK, NJ 08933-7003			EXAMINER DOWE, KATHERINE MARIE	
			ART UNIT 3734	PAPER NUMBER
			NOTIFICATION DATE 06/27/2011	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jnjuspatent@corus.jnj.com
lhowd@its.jnj.com
gsanche@its.jnj.com

Office Action Summary	Application No. 10/579,014	Applicant(s) KUHNS ET AL.	
	Examiner KATHERINE DOWE	Art Unit 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/13/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 15, 2010 has been entered.
2. Claims 1-3 and 8-24 are currently pending.

Claim Objections

3. Claims 8-24 are objected to because of the following informalities: Claims 8-24 depend, directly or indirectly, from claim 4 which has been canceled. Appropriate correction is required. For examination purposes, claims that depend directly from claim 4 are being treated as depending from claim 1.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1, 9-12, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewerhardt et al. (US 1,950,788) in view of Pena (US 5,178,133). Regarding claim 1 and 9-11, Ewerhardt et al. disclose a diagnostic device for

pathologies of naturally occurring tubular anatomical structures comprising: a tubular elongated structure (10) developing between a proximal end and a distal end and being adapted to be inserted in the tubular anatomical structure, means for locally dilating (12) the walls of the tubular anatomical structure being associated with the distal end of said elongated structure, said means for locally dilating comprising a plurality of petals (12), wherein each petal comprises an arm which can broaden into a curved surface which has an asymmetric conformation with respect to the respective arm (Figures 1 and 2), the petals being movable between a closed position (Fig. 1), wherein the petals overlap each other (Fig. 1), for the introduction of the device and at least one open position (Fig. 2) for the viewing and evaluation of the pathology, control means (21) being associated to the proximal end of the elongated structure, said control means being operatively connected to said means for locally dilating in order to move them between the closed position and the open position, and vice versa (col. 3, ln. 47-51), said means for locally dilating having a rounded non-traumatic tip. The petals must transition through an intermediate position when moving from a fully closed configuration (Fig 1) to a fully opened configuration (Fig 2). Furthermore, the control means comprises a threaded mechanism that blocks the device from being moved to the open position until the handle is further manipulated (col 3, ln. 1-14 and 35-40). However, Ewerhardt et al. fail to disclose a continuous membrane. Pena discloses a means for locally dilating (12) comprising a continuous transparent elastic membrane (34) externally covering dilating arms (12) for allowing the surgeon optimal viewing of the surgical field (see abstract). It would have been obvious to one of ordinary skill in the art to modify Ewerhardt et al. to

include a continuous transparent elastic membrane externally covering the petals to evenly dilate the surrounding tissue in the surgical field as suggested by Pena.

Ewerhardt et al. in view of Pena disclose the membrane external to the petals when the petals are overlapping in the closed position.

Regarding claim 12, Ewerhardt et al. disclose said elongated structure comprises an inner tube (21) and an outer tube (10) adapted to internally receive said inner tube, said inner tube and said outer tube being suitable to translate relatively to each other to open or close said petals (col. 3, ln.15-19).

Regarding claim 20, Ewerhardt et al. disclose said petals (12) are formed as one piece with said outer tube (10; Fig. 1).

Regarding claim 21, Ewerhardt et al. disclose each petal (12) couples with a portion of said inner tube (21) forming a unidirectional guide adapted to close or open the petals subsequent to the translation of the inner tube relative to the outer tube and the petals (Fig. 2).

Regarding claim 22, Ewerhardt et al. disclose each petal (12) comprises a longitudinally extending rib (17) and wherein said inner tube (21) comprises a distal flange (15) provided with openings (16) adapted to couple with respective ribs (17) of said petals (col. 2, ln. 105-120).

Regarding claim 23, Ewerhardt et al. fail to disclose wherein said rib (17) has a T- shaped cross-section and wherein said openings has a C-shaped cross-section suitable to couple with the cross-section of a respective rib. It would have been an obvious matter of design choice to give the rib a T-shaped cross section and the

Art Unit: 3734

openings of the inner tube of the distal flange a C-shaped cross section, since applicant has not disclosed that the particular coupling solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the ribs and the openings having any shaped cross-sections which fit together.

6. Claim 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewerhardt et al. (US 1,950,788) in view of Pena (US 5,178,133) as applied to claim 1 above, and further in view of Wallace (US 2,621,651). Ewerhardt et al. fail to disclose a means of viewing adapted to be associated with the elongated tubular structure and to reach the tract of the tubular anatomical structure. Wallace et al. disclose a dilating instrument locally dilating tubular anatomical structures, the dilator comprising an elongated means of viewing (40) associated with a hollow elongated tubular member for viewing the dilated area. It would have been obvious to one of ordinary skill in the art to modify the dilation tool of Ewerhardt et al. to comprise a means of viewing associated with the hollow elongated tubular member as suggested by Wallace et al. to allow the surgeon to view the surgical site.

7. Claim 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewerhardt et al. (US 1,950,788) in view of Pena (US 5,178,133) as applied to claim 12 above, and further in view of Bertolero et al. (US 2005/0159645).

Ewerhardt et al. fail to disclose a petal and outer surface of the outer tube comprise at least one detection element or marker. However, Bertolero et al. disclose a

detection element or marker on an outer sheath (paragraph 8) for determining the location in the body. It would have been obvious to provide a detection elements or radiopaque marker on the outer tube and/or on at least one petal to allow the location of the device in the body to be determined.

8. Claims 14-19 and 24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewerhardt et al. (US 1,950,788) in view of Pena (US 5,178,133) as applied to claim 12 above, and further in view of Sijp (DE 19828099 A1).

Regarding claims 14-16, Ewerhardt et al. in view of Pena fail to disclose an the inner tube has an annular groove adapted to receive and draw an end of said petals, said outer tube having openings to receive said petals, and said outer tube comprising a notch suitable to be inserted inside an aperture of a respective petal. Sijp discloses a device for dilating a tubular anatomical structure comprising an elongated structure, petals for locally dilating the walls of the anatomical structure, the elongated structure comprises an inner tube (10) and an outer tube (1) adapted to internally receive said inner tube, said inner tube and said outer tube being suitable to translate relatively to each other to open or close said petals (Fig. 4-5). Sijp discloses the inner tube (1) has an annular groove adapted to receive and draw an end of said petals (3; Fig. 3-5). Sijp discloses said outer tube (10) has openings to receive said petals (Fig. 3-5). Sijp discloses at an opening said outer tube (10) comprises a notch suitable to be inserted inside an aperture (4) of a respective petal (3). It would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art to substitute the elongated

tubular structure of Ewerhardt et al. with the elongated tubular structure of Sijp in order to achieve the same predictable result of opening and closing the petals through relative movement of the inner and outer tubes.

Regarding claims 17-19, Ewerhardt et al. in view of Pena fail to disclose said inner tube has a distal grooved length or a threaded length adapted to receive and draw an end of a petal comprising a toothed area, wherein at an aperture said outer tube has seats adapted to receive a pivot of a corresponding petal. Sijp discloses a device for dilating a tubular anatomical structure comprising an elongated structure, petals for locally dilating the walls of the anatomical structure, the elongated structure comprises an inner tube (10) and an outer tube (1) adapted to internally receive said inner tube, said inner tube and said outer tube being suitable to translate relatively to each other to open or close said petals (Fig. 4-5). Sijp discloses said inner tube (1) has a distal grooved length or a threaded length adapted to receive and draw an end of a petal (3) comprising a toothed area (8; Fig. 3). Sijp discloses said outer tube (218) has openings to receive said petals (Fig. 4-5). Sijp discloses wherein at an aperture said outer tube (218) has seats (4) adapted to receive a pivot (8) of a corresponding petal (3; Fig. 3-5). It would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art to substitute the elongated tubular structure of Ewerhardt et al. with the elongated tubular structure of Sijp in order to achieve the same predictable result of opening and closing the petals through relative movement of the inner and outer tubes.

Regarding claim 24, Ewerhardt et al. fail to disclose a holding body at the proximal end of the outer tube. Sijp discloses a device for dilating a tubular anatomical

Art Unit: 3734

structure comprising an elongated structure, petals for locally dilating the walls of the anatomical structure, the elongated structure comprises an inner tube (10) and an outer tube (1) adapted to internally receive said inner tube, said inner tube and said outer tube being suitable to translate relatively to each other to open or close said petals (Fig. 4-5). Sijp discloses a holding body (6) arranged at the proximal end of an outer tube and a holding body (6) arranged at the proximal end of said inner tube. It would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art to substitute the elongated tubular structure of Ewerhardt et al. with the elongated tubular structure including the holding members of Sijp in order to achieve the same predictable result of opening and closing the petals through relative movement of the inner and outer tubes.

Response to Arguments

9. Applicant's arguments filed January 15, 2010 have been fully considered but they are not persuasive. Applicant argues Ewerhardt et al. and Pena fail to disclose the device has an intermediate position wherein the device is blocked from being moved to the open position until the handle is further manipulated. The examiner respectfully disagrees. The control means comprises a threaded engagement such that to expand or contract the petals, the shaft (21) must be rotated and it is clear the petals must transition through an intermediate position when changing from a fully collapsed configuration to a fully expanded configuration. The screw mechanism prevents the dilating means from changing the position of expansion until the handle is further manipulated (i.e. physically rotating the shaft 21). Furthermore, thumb nut (27) may

Art Unit: 3734

additionally lock the position of the handle and thus block the device from being moved to an open position from an intermediate position until the handle is further manipulated.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoon (US 5,556,376) additionally teach a handle mechanism for retracing an outer sheath with respect to an inner sheath to allow expansion of a dilating mechanism, wherein the handle locking mechanism (42) comprises a plurality of locking teeth to lock the relative positions of the inner and outer sheaths at each incremental stage of expansion and thus the device may be blocked in an intermediate position until the handle is further manipulated.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHERINE DOWE whose telephone number is (571)272-3201. The examiner can normally be reached on M-F 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jackson can be reached on (571) 272-4697. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3734

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Katherine M Dowe/
Examiner, Art Unit 3734

June 20, 2011